



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,671	02/09/2007	Hyeok Deok Kim	0465-1494PUS1	3792

2292 7590 05/29/2009
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

LE, THANH TAM T

ART UNIT	PAPER NUMBER
----------	--------------

2839

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

05/29/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/562,671	Applicant(s) KIM, HYEOK DEOK	
	Examiner Thanh-Tam T. Le	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/18/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 5/18/2009 is being considered by the examiner.

Abstract

3. The abstract of the disclosure is objected to because the reference number should be in parentheses. The phrase "The present invention improves a driving unit of a washing machine, for improving workability in fabrication of a rotor, and enhance rigidity of the rotor. To achieve this, the present invention provides a direct drive motor" should be replaced with – A direct drive motor -- Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 1-20 are objected to because of the following informalities: All the references number should be in parentheses. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 17, the phrase “the washing shaft” is lack of anticipated, because it does not mention before.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

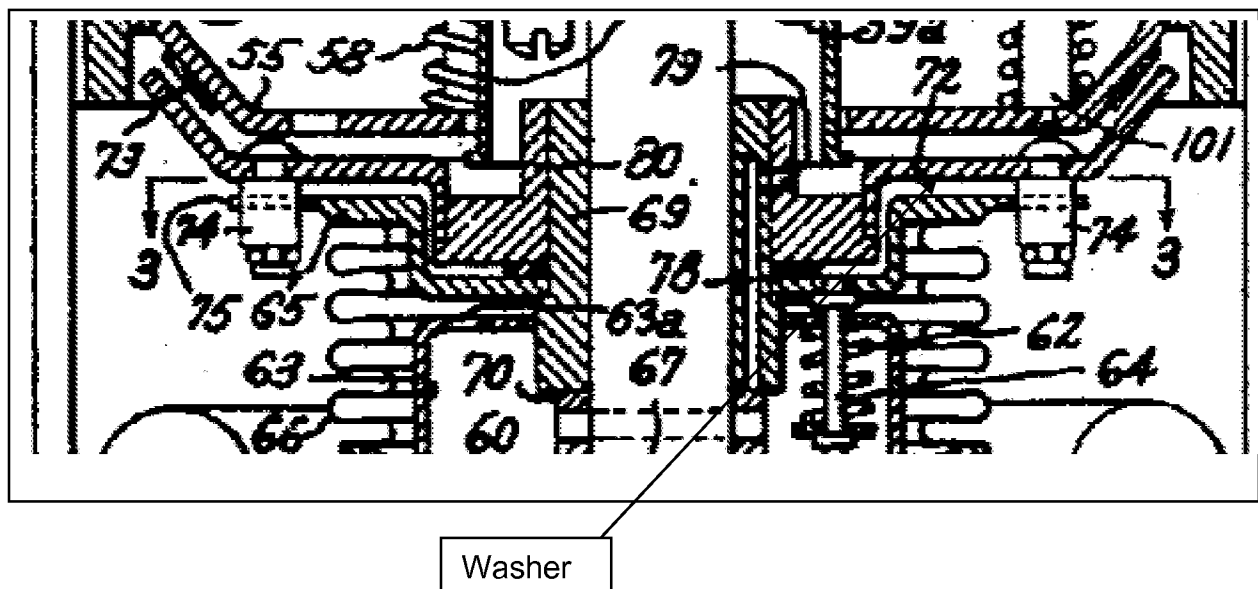
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (6,460,382) in view of McNairy (2,485,623).**

Kim et al. In figures 2-9, disclose a direct drive motor in a washing machine comprising a stator (14) having a winding portion with coils wound thereon, a rotor having a sidewall (13b), and a rear wall (13a) with a pass through hole (131) at a center, Kim et al. also disclose a connector (16) of resin having a vibration mode different from a washing shaft, fixedly secured to the rear wall of the rotor for supporting the washing

shaft and coupling means for coupling the connector and the rotor together. Kim et al. fail to show an annular washer.

McNairy in figure 2, teaches a motor having a washer (not number, see attached drawing, above a clutch member (72)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the direct drive motor of Kin et al. with an addition of a washer as taught by McNairy in order to protect the motor in all weather condition.



Regarding claim 10, Kim et al. disclose the rotor, which is constructed of steel plate by pressing, to form the side wall and the rear wall as one body.

Regarding claim 11, McNairy teaches the fastening bosses on the annular washer that are in at least two lines in a circumferential direction as imaginary circles connecting centers of the fastening bosses have diameters different from each other.

Art Unit: 2839

Regarding claim 12, Kim et al. in combination with McNairy disclose the annular washer including positioning holes in which the positioning projections (160) on the connector are placed respectively, separate from the fastening bosses of the washer from McNairy.

Regarding claims 13 and 19, Kim et al. in combination with McNairy disclose the positioning holes, which are formed along a circumferential direction of an imaginary circle having a diameter different from an imaginary circle connecting centers of the fastening pass bosses on the annular washer.

Regarding claims 14 and 18, Kim et al. disclose the rotor including a hub (201) projected from the rear wall toward the washing shaft for reinforcing strength, and providing a seating surface

Regarding claims 15 and 20, McNairy teaches the annular washer including a bent portion (see figure 2) on a circumference having a shape in conformity with a shape of a bent portion of the hub.

Regarding claim 16, Kim et al. in combination with McNairy disclose the annular washer, which is in close contact with, and fixedly secured to an outer side of the rear wall of the rotor, and the connector is mounted on an inner side of the rear wall of the rotor.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thanh-Tam T. Le/
Primary Examiner, Art Unit 2839.
5/24/09.